

CLAIMS

1. A stator (3) of an electric machine (1) comprising
5 an autonomous cooling circuit, means for sealing the
cooling circuit with respect to a rotor (2) of the
electric machine (1), a magnetic circuit comprising
slots (14, 20), and a winding (15) arranged in the
slots (14, 20), characterized in that the sealing means
10 comprise a fluidtight shell (9) sandwiched in the
magnetic circuit (7, 8).

2. The stator as claimed in claim 1, characterized in
that the shell (9) is of tubular shape and is centered
15 around an axis (13) of revolution of the electric
machine.

3. The stator as claimed in either of claims 1 and 2,
characterized in that the magnetic circuit comprises a
20 first stack of laminations (7) produced outside the
shell (9) and a second stack of laminations (8)
produced inside the shell (9).

4. The stator as claimed in claim 3, characterized in
25 that the first and the second stacks of laminations (7,
8) comprise slots and in that the slots (20) of the
second stack of laminations (8) are arranged in the
continuation of the slots (14) of the first stack of
laminations (7).

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5. The stator as claimed in claim 4, characterized in
that the winding (15) is completely situated in the
slots (14) of the first stack of laminations (7).

35 6. The stator as claimed in either one of claims 4
and 5, characterized in that the second stack of
laminations (8) comprises bridges (21) which close the
slots (20) of the second stack of laminations (8), the

bridges (21) being situated in the immediate vicinity of a gap (25) of the electric machine.

7. The stator as claimed in one of the preceding
5 claims, characterized in that the shell (9) is formed by a coating of one of the stacks of laminations (7 or 8).